## I CLAIM AS MY INVENTION:

- 1. A lithotripsy apparatus comprising:
- a triggerable shockwave generator for non-ultrasonically generating and emitting, upon being triggered, a shockwave focused at a focus;
- an ultrasound applicator adapted to apply an ultrasound field to a region of an interior of a subject in whom a calculus is present, and to generate electronic signals dependent on interaction of said ultrasound field with the region;
- an ultrasound device for generating an ultrasound B-image from said electronic signals; and
- an evaluation device for evaluating said ultrasound B-image and for generating a control signal to said shockwave generator to enable triggering of emission of said shockwave by said shockwave generator only if coincidence between said focus and said calculus is recognized in said ultrasound B-image by said evaluation device.
- 2. A lithotripsy apparatus as claimed in claim 1 wherein said shockwave generator is an electromagnetic shockwave generator.
- 3. A lithotripsy apparatus as claimed in claim 1 wherein said evaluation device is integrated in said ultrasound device.
- 4. A lithotripsy apparatus as claimed in claim 1 wherein said ultrasound device has an output at which output at which image signals, representing said ultrasound B-image, are present, and wherein said evaluation device is independent of said ultrasound device and is supplied with said image signals from said output.

5. A lithotripsy apparatus as claimed in claim 1 comprising a manually operable trigger switch for, upon actuation thereof, triggering supply of voltage to said shockwave generator for use in generating said shockwave, and a control switch connected in series between said trigger switch and said shockwave generator and actuated by said control signal from said evaluation device, said control signal closing said control switch when said coincidence exists.